



DEPARTMENT OF THE NAVY

NAVAL AIR SYSTEMS COMMAND  
NAVAL AIR SYSTEMS COMMAND HEADQUARTERS  
WASHINGTON, DC 20361-0001

IN REPLY REFER TO

NAVAIRINST 5451.65  
AIR-7101  
23 June 1993

NAVAIRINST 5451.65

From: Commander, Naval Air Systems Command

Subj: MISSIONS, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION ACTIVITIES

Encl: (1) Mission, Functions, and Tasks of the Naval Air Warfare  
Center Aircraft Division, Patuxent River, MD  
(2) Mission, Functions, and Tasks of the Naval Air Warfare  
Center Aircraft Division, Indianapolis, IN  
(3) Mission, Functions, and Tasks of the Naval Air Warfare  
Center Aircraft Division, Lakehurst, NJ  
(4) Mission, Functions, and Tasks of the Naval Air Warfare  
Center Aircraft Division, Trenton, NJ  
(5) Mission, Functions, and Tasks of the Naval Air Warfare  
Center, Aircraft Division, Warminster, PA  
(6) Mission, Functions, and Tasks of the Naval Air Station,  
Patuxent River, MD

1. Purpose. To issue the functions and tasks to be performed by the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV) activities in the accomplishment of their assigned missions.

2. Cancellation. This instruction cancels NAVAIR Instruction 5451.63C, Naval Avionics Center, Indianapolis, IN; mission and functions of dated 22 February 1980; and NAVAIR Instruction 5451.64C, Mission, Functions, and Tasks of the Naval Air Engineering Center, Lakehurst, NJ, dated 23 October 1985.

3. Overseas Diplomacy. NAVAIRWARCENACDIV activities serve as effective instruments of U.S. Foreign Policy by initiating and continuing action programs that promote positive relations between the commands and foreign nationals, and assist individual naval personnel and their families to work effectively, live with dignity and satisfaction, and function as positive representatives of the Navy and of the United States while overseas.

4. Action. In accomplishing the assigned missions, the Commander/Commanding Officers will ensure performance of the functions and tasks set forth in enclosures (1) through (6). Send recommended changes via the chain of command to the Commander, Naval Air Systems Command.

L. F. MILAN  
Assistant Commander for  
Corporate Operations

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NAVAIRINST 5451.65  
23 June 1993

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MISSION, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION  
PATUXENT RIVER, MD

Ref: (a) OPNAVNOTE 5450 Ser 09B22/1U510503 of 23 Dec 91

1. Mission. As directed by reference (a), the mission of the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Patuxent River, MD, is as follows:

To be the Navy's principal research, development, test, evaluation, engineering, and fleet support activity for Naval aircraft, engines, avionics, aircraft support systems, and ship/shore/air operation. This mission includes: research and development of manned and unmanned air vehicles, air vehicle propulsion systems, core and mission-unique avionics including air ASW systems, airborne surveillance systems, aircraft launch and recovery systems, aviation support equipment, and related functions such as aircraft modeling and analysis and aircraft active and passive signatures; systems integration of all air platform subsystems; conduct of test and evaluation for these same aircraft, propulsion, avionics, and support systems, as well as aircraft electronics warfare throughout the spectrum of the life cycle to ensure successful operational performance; maintain aircraft test and evaluation ranges; assure an effective transition to production, including manufacturing production support and pilot/emergency production, to maintain a responsive industrial base; and perform in-service engineering of aircraft, avionics, and launch/recovery systems; direct the operations of the Naval Air Warfare Center Aircraft Division and its subordinate activities.

2. Status and Command Relationship. NAVAIRWARCENACDIV is a shore activity in an active status under a Commander.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center, Washington, DC
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD

23 June 1993

b. Area Coordination

Commandant, Naval District, Washington, DC

c. Primary support responsibility for NAVAIRWARCENACDIV is exercised by the Commander, Naval Air Warfare Center Headquarters, Washington, DC.

3. Functions. In accomplishing the assigned mission, the COMNAVAIRWARCENACDIV is responsible for the following functions:

a. Participate in technology base development, operational systems development, production support for aircraft weapon systems, and provide associated test and evaluation support.

b. Perform ground, flight and simulation tests and conduct engineering evaluations of aircraft weapons systems, subsystems, related devices and their associated support throughout their life-cycle, including concept validation (advanced development and engineering development models), developmental test phases I and II, inspection of survey aircraft trials, follow-on test and evaluations, integrated logistics support evaluation and certifications, production acceptance test and evaluations in support of production and rework of aircraft weapon systems, and in-service aircraft weapons systems test programs.

c. Monitor all phases of new acquisition systems and rework/update of in-service aircraft weapon systems with primary emphasis on the developer's activity relative to test and evaluation.

d. Witness and report on developer's demonstrations in aircraft weapon system programs.

e. Provide a principal site for aircraft Engineering Manufacturing Development Program.

f. Provide test and evaluation resource support for conducting various phases of operational test and evaluation.

g. Investigate and develop new ground/ship, flight and simulation testing and test instrumentation techniques.

h. Operate the U.S. Naval Test Pilot School for Navy, Marine and Army pilots, Navy flight officers and engineers.

i. Provide program management support, development support and engineering services, including test and evaluation in aircraft weapon system technical fields such as:

(1) Aircraft weapon system, trainer and simulator full system integration, technical performance and effectiveness.

(2) Aircraft structure and flight control, electrical, environmental control, fuel, hydraulic, mechanical, pneumatic propulsion gun, life support and related ground support systems.

(3) Aircraft sensors, data storage and processing computer hardware and software involved in operation, control and maintenance of the aircraft; display; command/control/communication and intelligence systems; electronic warfare systems, fire control systems and related ground/ship systems, interfaces, and equipment.

(4) Aircraft flying qualities, performance, carrier launch and recovery characteristics and envelopes, helicopter/ship dynamic interface, weapon/store separation characteristics and envelopes and ballistics, landing aids/systems, electromagnetic environmental effects, training, pilot/aircraft checkout criteria, aircraft and aircraft systems simulators, human factors and safety.

(5) Aircraft weapon system, subsystem, component and related support systems reliability, maintainability, supportability and system safety.

(6) Total weapon system (aircraft, weapon system and ship) interface and technical performance.

j. Provide test/exercise planning, range, target, threat simulation and other support services for fleet training, tactics, tactics development and operational test and evaluation.

k. Provide developmental support and serve as lead field activity for range systems development.

l. Provide range support services, including operation and maintenance of instrumentation systems, test planning, area surveillance, range clearance, frequency management, threat simulation, meteorology, safety data collection and reduction, communications, photographic coverage, targets and test hardware support.

m. Provide engineering services for responsive development, prototype fabrication, aircraft modifications and related technical documentation support.

n. Perform engineering cognizance and lead field activity functions as assigned by COMNAVAIRSYSCOM.

NAVAIRINST 5451. 65

23 June 1993

o. Perform quality assurance and assessment on all aspects of assigned test and evaluation processes and range, technical and base support services.

p. Develop, operate, and maintain facilities and capabilities necessary for test and evaluation and fleet support of aircraft weapon systems with emphasis on test realism and systems interoperability.

q. Provide organizational maintenance for all aircraft assigned to FTEG and the Naval Air Station, Patuxent River, MD.

r. Provide related technical support to NAVAIRSYSCOM, other SYSCOM's, other field activities, Navy Laboratories, and other Government agencies/services.

s. Operate and maintain the NAVAIRSYSCOM Special Flight Test Instrumentation Pool.

4. Tasks. COMNAVAIRWARCENACDIV exercises military command over the Naval Hospital, Patuxent River, MD, as the Responsible Line Commander. For medical purposes only, COMNAVAIRWARCENACDIV reports to the Commandant, Naval District, Washington, DC, as the echelon 2 command.

MISSION, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION  
INDIANAPOLIS, IN

Ref: (a) OPNAVNOTE 5450 ser 09B22/1U510503 of 23 Dec 91

1. Mission. As directed by reference (a), the mission of the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Indianapolis, IN, is as follows:

To conduct research, development, engineering, material acquisition, pilot and limited manufacturing, technical evaluation, depot maintenance and integrated logistics support on assigned airborne electronics (avionics), missile, spaceborne, undersea and surface weapon systems, and related equipment. To perform such other functions and tasks as directed by the Commander, Naval Air Warfare Center.

2. Status and Command Relationship. NAVAIRWARCENACDIV, Indianapolis, IN, is a shore activity in an active status under a Commanding Officer.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center, Washington, DC
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD
- 5 Commanding Officer, Naval Air Warfare Center Aircraft Division, Indianapolis, IN

b. Area Coordination

Chief of Naval Education and Training to be exercised through Naval Training Center, Great Lakes, IL.

c. Primary support responsibility for NAVAIRWARCENACDIV, Indianapolis, IN, is exercised by the Commander, NAVAIRWARCENACDIV, Patuxent River, MD.

3. Functions. In accomplishing the assigned mission, the Commanding Officer, NAVAIRWARCENACDIV, Indianapolis, IN, is responsible for the following functions:

a. Determine present and future avionics and other equipment needs in assigned areas and define these needs, where possible, so that competition for the design and production of hardware can be open to all qualified suppliers.

(1) Perform and/or direct and monitor research and development efforts to determine the feasibility of concepts and to establish the end item characteristics required to meet the government's needs. Conduct mathematical analyses of systems and concepts. Develop, manufacture and evaluate state-of-the-art functional techniques, equipment and components.

(2) Perform and/or direct and monitor engineering and operational systems development efforts to make available the plans, designs and specifications that embody the government's requirements and make possible economical manufacture and subsequent service use of an end product.

(3) Validate that new systems incorporate standardized hardware and software components that maximize commonality across aircraft and weapon systems, minimize duplicative development efforts, and minimize life cycle costs of logistics for equipments that perform identical or similar functions.

(4) Conduct and/or direct and monitor engineering studies and improvement programs for increasing the functional performance, producibility, reliability and maintainability of electronic, electrical and mechanical equipment.

(5) Utilize engineering and manufacturing test data to validate the designs of military hardware, software, and firmware, and ensure these designs support a low-risk transition to industry production, through competitive procurement where practicable, with special emphasis directed toward increasing the role of medium and small business suppliers.

(6) Transition validated definitions of required government products to small and medium-size businesses, under competitive procedures, for production of hardware. Assist these businesses in adapting their facilities, processes, procedures and personnel from those required as suppliers of commercial equipment to those required to support their role as low-cost suppliers of reliable government equipment.

(7) Validate that manufacturing processes, techniques, devices and mechanisms utilized in support of NAVAIR contractor operations take advantage of technological improvements. Advance the state-of-the-art in appropriate areas.

b. Determine, develop, and/or provide alternate resources for fleet avionics and other military equipment in areas in which present or potential problems exist relative to sole source, availability, proprietary constraints, cost, risk, system performance, reliability, complexity, etc.



(1) Provide manufacturing services for limited quantities of equipment including hardware, firmware, and/or software to support emergency operational needs and fleet requirements until industrial sources can be established or, in the event of contractor default or incapacitation, reestablished at satisfactory risk levels.

(2) When directed by higher authority, mobilize to meet the emergency needs of national defense. Increase industry and activity outputs to support the increased demands for additional electronic systems and weapons.

(3) Perform depot maintenance of material and equipment and logistic support functions related to the direct fleet support of assigned avionics systems, missile systems, etc., particularly those being groomed for industry repair/support, those of low population, and those of experimental nature and/or of high complexity.

(4) Provide emergency, quick response depot maintenance support to ensure fleet support until routine organic or industry support can be established.

c. Serve as the technical center of excellence in support of the Naval Air Systems Command (NAVAIRSYSCOM) in assigned areas, such as core avionics aircraft wiring, fiber optics, etc.

d. Serve as the NAVAIRSYSCOM "Face to Industry" regarding avionics systems and equipment for assigned airborne, missile and ground based systems with responsibilities including, where applicable:

(1) Development and documentation of contract requirements.

(2) Contractor solicitation.

(3) Contract award and management.

(4) Technical direction/coordination and progress assessment.

(5) Assistance to contractors who are providing avionics functions (manufacturing, test, repair and overhaul) to NAVAIR.

e. Perform, administer and/or monitor government programs for the development and acquisition of avionics and other military equipment.

(1) Provide configuration control and logistic support engineering for electronic systems, particularly those of high technology mechanization, by performing such functions as

23 June 1993

nonstandard parts approval, documentation control, specification control, technology analysis and procurement strategy support for large scale integration components and systems, microwave integrated circuit systems, surface acoustic wave device products, etc.

(2) Provide support, including program management support, for assigned programs. Transition these programs to a competitive procurement scenario in industry where practicable. Assist NAVAIR and the industrial contractor during the transition and production periods.

(3) When assigned, perform the duties of deputy program manager and coordinate all features of assigned weapons/avionics systems development, including the management of related program elements assigned to participating Navy field activities.

f. Determine the government's requirements for hardware, software, firmware, documentation and services have been met.

(1) Evaluate contractor products including functional tests, design approval tests, preproduction tests, first article tests, reliability and maintainability tests and testing of systems, subsystems and components to ensure compliance with applicable specifications.

(2) Establish and maintain the capability to inspect/test advanced technology elements in support of present and future NAVAIR acquisition of military systems and components.

(3) Evaluate in-house designs and concepts in the areas of reliability, maintainability, preproduction, life and qualification testing including prototype evaluation.

(4) Conduct statistical studies and quality audits as part of exercising statistical quality control. Make recommendations to NAVAIR on waiver actions.

(5) Evaluate and approve/disapprove the application of nonstandard passive and active electronic components proposed for use by contractors.

g. Serve as Technical Coordination Center for definition, acquisition and development of avionics related information and logistic support elements as required by basic platform suppliers/users for assigned aircraft, missiles, spacecraft and ground support equipment.

h. Provide cost estimating services relating to complex, state-of-the-art avionics hardware, software, firmware and logistic

support elements for use in development and in support of budget submissions, program justifications/validations and as a pricing yardstick for NAVAIR/NAVAIRWARCENACDIV, Indianapolis, IN, contract negotiators/administrators.

i. Maintain capabilities and personnel that also serve organizations other than NAVAIRWARCENACDIV, Indianapolis, IN, including:

- (1) Patent Counsel.
- (2) Personnel who perform noncentralized procurement and serve as a transaction item reporting stock point for Naval Aviation Supply Office and Navy Ships Parts Control Center material of various cognizance symbols as specified in the Navy Supply Systems Command manual and pertinent directives.
- (3) Human Resource Office personnel who provide employment and classification services for Navy recruiting and Navy Reserve.
- (4) Disbursing facilities for naval personnel in temporary duty status.
- (5) Data Communications Branch which provides message handling services for Navy and Marine Corps activities in the metropolitan Indianapolis area.
- (6) Navy Calibration Laboratory and furnish calibration services as requested.
- (7) Medical service to assigned military personnel and their dependents.
- (8) Performs additional tasks as assigned and approved by proper authority.

MISSION, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION,  
LAKEHURST, NJ

Ref: (a) OPNAVNOTE 5450 Ser 09B22/1U510503 of 23 Dec 91

1. Mission. As directed in reference (a), the mission of the Naval Air Warfare Center Aircraft Division, Lakehurst, NJ, is as follows:

To conduct programs of research, engineering, development, development test and evaluation, systems integration, limited production, procurement, integrated logistic support management, and fleet engineering support in: aircraft launching, recovery, and landing aid systems and support equipment for aircraft and for airborne weapons system. To provide, operate, and maintain test sites, facilities, and support services for tests of the above systems and equipment, and to conduct research and development of equipment and instrumentation used in tests. To provide systems engineering support services, and to support DOD standardization and specification programs. To provide services and material, and to operate and maintain aviation and other facilities in support of assigned programs, and for other activities and units as designated by appropriate authority.

2. Status and Command Relationship. NAVAIRWARCENACDIV, Lakehurst is a shore activity in an active status under a Commanding Officer.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center, Washington, DC
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD
- 5 Commanding Officer, Naval Air Warfare Center Aircraft Division, Lakehurst, NJ

b. Area Coordination

Commander in Chief, U.S. Atlantic Fleet to be exercised through the Commander, Naval Base, Philadelphia, PA.

c. Primary support responsibility for NAVAIRWARCENACDIV, Lakehurst, NJ, is exercised by the Commander, NAVAIRWARCENACDIV, Patuxent River, MD.

3. Functions. In accomplishing the assigned mission, the Commanding Officer, NAVAIRWARCENACDIV, Lakehurst, NJ, is responsible for the following functions:

a. Technology Development (TD) and In-Service Engineering/Logistics Support (ISE/LS):

(1) Participate in concept formulation and contract definition phases for new aircraft, weapon systems, and ships; determine all requirements relating to ships and related shore based and support equipment (SE) area.

(2) Manage and /or conduct programs for the development, engineering, development test and evaluation, procurement, production, and associated integrated logistics support of assigned ship installation equipment.

(3) Evaluate and approve proposed SE for assigned aircraft, weapon systems, and related equipment.

(4) Conduct functional evaluation programs on aircraft launch, recovery, landing aid systems, and SE to determine limits, procedures, suitability, and supportability to operate with existing Fleet aircraft and missiles. Evaluate reliability, maintainability, operational availability, general capabilities, and limitations.

(5) Conduct evaluation of above systems and equipment to determine fulfillment of design specifications and technical suitability and supportability for operational test and evaluation of service use.

(6) Assume basic design and maintenance engineering cognizance of assigned in-service launch, recovery, visual landing aids, SE, and such other equipment. Develop requirements for the installation, operation, maintenance, repair, and overhaul of assigned equipment. Provide, or assist in the determination and preparation of personnel and training requirements for operation, service maintenance, and repair. Provide and conduct in-process and final acceptance review of contract data requirements. Prepare and issue maintenance and overhaul instructions, technical orders, and bulletins.

(7) Conduct programs and studies regarding ship suitability of aircraft and air-launched weapons and establish aeronautical requirements of ships, carriers, and air-capable ships.

(8) Review engineering change proposals for aircraft, weapon systems, SE, and related equipment to determine the impact on cognizant technical equipment and related support facilities.

(9) Conduct engineering projects in Department of Defense (DOD) standardization program by developing and maintaining military specifications, standards, standardization studies, and

other standardization documents in which NAVAIR has a responsibility and which are used in the design and logistics support of weapons systems and associated equipment. Serve as the central point of contact for NAVAIR in the coordination of standardization documents of interest to NAVAIR, but developed by other service, other federal agencies, and industry. Participate in international standardization programs in the areas of Air Standardization Coordinating Committee and Standardization Agreement North Atlantic Treaty Organization. Provide engineering support to elements of the Defense Supply Agency in procurement problems involving standardization documents under NAVAIR cognizance. Develop plans and techniques for increasing standardization of components and equipment under the control of NAVAIR.

(10) Recommend program goals and specific development tasks in all assigned mission areas. Prepare the technical documentation required for planning and proposing research, engineering development work, and for reporting its progress and accomplishments. Provide advisor, technical observer, and consultant service. Stay apprised of the state-of-the-art advances.

(11) Conduct programs covering the installation of all aeronautical support systems, facilities and equipment in ships and on shore for the operation, maintenance, handling and servicing of aircraft and air-launched weapons. These programs include monitoring of material scheduling of all NAVAIR-cognizant equipment and shipyard liaison by field representatives.

(12) Manufacture limited quantities of equipment to meet fleet emergencies, and fabricate experimental and prototype equipment to support the researching and development programs. As directed, assume responsibility for manufacture of certain critical ship installation or SE items (e.g., cross-deck pendants, barricades) where experience has shown that adequate quality control cannot be assured by competitive commercial procurement.

(13) Provide technical services and support to the fleet, type commanders, shipyards, air stations and rework facilities and other activities. Provide inspection, test and appropriate certification of ship installations equipment in connection with new installations, conversion and overhauls.

(14) Assume engineering cognizance and provide services for assigned in-service equipment including the design, engineering, development, test and evaluation (T&E), prototype manufacture and procurement phases.

(15) Develop nomenclature and identification policies and procedures, and assign all item names and type designations for

NAVAIRINST 5451.65  
23 June 1993

aeronautical, electronic, air-launched ordnance, and SE under the technical cognizance of NAVAIR (except aircraft, aircraft engines, and rocket motors). Process the assignments and issue the DOD popular names and designations for rockets and missiles under Navy design cognizance.

(16) Provide facilities and support, as required, to the Naval Air Warfare Center Aircraft Division, Patuxent River, MD, for carrier suitability tests and to the Operational Test and Evaluation Force for operational test and evaluation.

(17) Observe and certify results of contractors' shorebased demonstrations of equipment.

(18) Conduct developmental tests of ship installations and SE for commercial and other governmental activities where appropriate.

(19) Initiate and conduct studies, applied technology development and engineering to improve related test equipment, instrumentation procedures and methods of data analysis and interpretation used in T&E effort.

(20) Provide training to service personnel in operation and maintenance of assigned equipments, using service prototype systems.

(21) Perform qualification tests on components as required to certify products for the Navy Qualified Products List.

(22) Conduct engineering development and test programs on appropriate systems following current tri-service agreements.

(23) Act as technical advisor to inventory control points and provide quality control, reliability and maintainability service.

b. Flight Support Services (FSS)

(1) Operate and maintain sites utilized in test of launch, recovery, and landing aids systems, and SE for aircraft and airborne weapons systems.

c. Automatic Data Processing (ADP)

(1) Provide a software control center for NAVAIR automatic avionics testing systems.

d. Technology Development and Electronics Engineering/Material Support

(1) Operate, maintain, calibrate and install all electronic and photographic test data acquisition systems.

e. Perform shore activity support functions in the following:

- (1) Aircraft Maintenance
- (2) Automatic Data Processing
- (3) Communications
- (4) Facilities Support
- (5) Financial Services
- (6) Firefighting
- (7) Inter/Intra command Support
- (8) Personnel Support
- (9) Security
- (10) Supply
- (11) Weapons

4. Tasks. The Navy Resale Activity, Lakehurst, NJ, is aligned as an echelon 6 shore activity reporting to the CO NAVAIRWARCENACDIV, Lakehurst, NJ, for military command. Primary and technical support is provided by the Commander, Naval Supply Systems Command.



MISSION, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION  
TRENTON, NJ

Ref: (a) OPNAVNOTE 5450 Ser 09B22/1U510503 of 23 Dec 91

1. Mission. As directed by reference (a), the mission of the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Trenton, NJ, is as follows:

To provide complete technical and engineering support for air breathing propulsion systems, including their accessories and components, and fuels and lubricants, to the Naval Air Systems Command and the fleet by: managing and performing applied research and development leading to new propulsion systems; participating in the development and evaluation of new propulsion systems; conducting propulsion system tests and evaluation as necessary to ensure successful mission accomplishment, and assisting in the determination of corrective action necessary for the resolution of operational service problems; and to perform such other functions and tasks as directed by the Commander, Naval Air Warfare Center.

2. Status and Command Relationship. NAVAIRWARCENACDIV, Trenton is a shore activity in an active status under a Commanding Officer.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center, Washington, DC
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD
- 5 Commanding Officer, Naval Air Warfare Center Aircraft Division, Trenton, NJ

b. Area Coordination

Commander in Chief, U.S. Atlantic Fleet, to be exercised through the Commander, Naval Base, Philadelphia, PA

c. Primary support responsibility for NAVAIRWARCENACDIV, Trenton, NJ, is exercised by the Commander, NAVAIRWARCENACDIV, Patuxent River, MD.

3. Functions. In accomplishing the assigned mission, the Commanding Officer, NAVAIRWARCENACDIV, Trenton, NJ, is responsible for the following functions:

NAVAIRINST 5451.65  
23 June 1993

- a. Evaluate air breathing propulsion systems, their components and accessories through simulated environmental and operational test, engineering analysis, disassembly, analytical inspection and reassembly of test engines.
- b. Manage and perform applied research, development and engineering work to improve or correct defects in new air breathing propulsion systems, their components and accessories; support operational requirements; and solve field service problems.
- c. Conduct theoretical research studies and perform experimental investigations to develop new evaluation procedures and technical requirements for specifications used in the procurement and performance evaluation of air breathing propulsion systems, their components and accessories.
- d. Provide the complete engineering and technical advisory and consulting service on matters relating to the development, evaluation and support of new air breathing propulsion systems.
- e. Conduct tests of air breathing propulsion systems in support of other governmental departments and agencies and Department of Defense contractors.
- f. Initiate applied research and development and engineering work necessary to provide and maintain facilities and equipment adequate for accomplishment of the mission.
- g. Manage and perform applied research and development related to advanced lubricating oils, engine lubricating-oil wetted components, advanced and synthetic aircraft fuels, and engine air pollutants.
- h. Perform test and evaluation for qualification of all aircraft engine oils, aircraft and engine fuel system components, and field service problems involving fuels, lubricants, and associated hardware.
- i. Formulate, evaluate, monitor and conduct research, exploratory development and advanced development programs as required.
- j. Provide administrative and technical direction to selected contracts of the Naval Air Systems Command.
- k. Provide administrative and logistic support to assigned activities as required.

MISSION, FUNCTIONS, AND TASKS OF THE NAVAL AIR  
WARFARE CENTER AIRCRAFT DIVISION  
WARMINSTER, PA

Ref: (a) OPNAVNOTE 5450 ser 09B22/1U510503 of 23 Dec 91

1. Mission. As directed by reference (a), the mission of the Naval Air Warfare Center Aircraft Division (NAVAIRWARCENACDIV), Warminster, PA, is as follows:

To be the principal Navy research, development, test, and evaluation center for aircraft, airborne antisubmarine warfare, aircraft systems (less aircraft-launched weapon systems).

2. Status and Command Relationship. NAVAIRWARCENACDIV, Warminster, PA, is a shore activity in an active status under a Commanding Officer.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center, Washington, DC
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD
- 5 Commanding Officer, Naval Air Warfare Center Aircraft Division, Warminster, PA

b. Area Coordination

Commander in Chief, U.S. Atlantic Fleet to be exercised through the Commander, Naval Base, Philadelphia, PA.

c. Primary support responsibility for NAVAIRWARCENACDIV, Warminster, PA, is exercised by the Commander, NAVAIRWARCENACDIV, Patuxent River, MD.

3. Functions. In accomplishing the assigned mission, the Commanding Officer, NAVAIRWARCENACDIV, Warminster, PA, is responsible for the following leadership areas and functions:

a. Leadership Areas:

- (1) Airborne antisubmarine warfare analysis, sensors and combat systems
- (2) Air warfare analysis (anti-air, anti-surface and strike warfare)
- (3) Tactical aircraft combat systems (pre-deployment and major upgrades)

- (4) Aircraft systems integration
- (5) Avionics (research and development only)
- (6) Air vehicles and associated subsystems (except full scale targets)
- (7) Aircrew equipment and life support
- (8) Human factors for aircrews
- (9) Airborne surveillance and reconnaissance sensors and systems
- (10) Airborne materials

b. Functions:

a. Basic research, exploratory development, advanced development, assessment of science and technology base, mission analysis, concept exploration and system demonstration/validation, full-scale engineering development, engineering in support of production, test and evaluation, major research, development, test and evaluation facility management, and user services and support to operating forces, including product improvement.

b. Air warfare analysis, including intelligence analysis, operations research, systems analysis, participation in fleet exercises and operations, and the evaluation of exercise results and operational reports.

c. Maintain leadership in relevant scientific and technical developments.

d. Provide systems engineering in the development and evaluation of new weapons systems and integrated combat systems concepts. Provide the capability to make technical and cost tradeoffs as part of the design process during all phases of development. Systematically explore ways to reduce life cycle costs, including government versus private sector resource decisions.

e. Develop and evaluate new weapons systems and integrated combat systems concepts to enhance the effectiveness of the Navy and Marine Corps, prove the feasibility of critical components, and build and demonstrate prototypes.

f. Assist program managers during the acquisition process of new systems by providing technical direction and other assistance. Provide cost conscious technical support to program managers in all

phases of systems development and acquisition, with emphasis on concept exploration, concept demonstration and validation, engineering development, initial production support, initial production, initial operations support and product improvement.

g. Support, modernize and improve the equipment in use by the Navy and Marine Corps primarily by maintaining and providing the technical knowledge, skills, and facilities for prompt, direct assistance to the fleet.

h. Maintain and provide technical knowledge and skills in the areas of systems engineering, reliability, maintainability, quality assurance, human engineering and system safety.

i. Maintain and provide a capability to assure that cost is considered as a factor equal in importance to technical requirements, and that costs are scheduled during all phases of development and deployment.

j. Maintain post-deployment involvement to provide specialized technical expertise and support during system maturation, leading to transition of technical support and responsibilities to other Navy activities.

k. Provide specialized technical support to the fleet for quick-reaction programs.

l. Provide life-cycle engineering of system software as assigned.

MISSION, FUNCTIONS, AND TASKS OF THE NAVAL  
AIR STATION, PATUXENT RIVER, MD

Ref: (a) OPNAVNOTE 5450 Ser 09B22/2U510646 of 14 Oct 92

1. Mission. As modified by reference (a), the mission of the Naval Air Station (NAS), Patuxent River, MD, is as follows:

To maintain and operate facilities and provide services and material to support operations of the Naval Air Warfare Center Aircraft Division, Patuxent River, MD, and other activities and units as designated by appropriate authority.

2. Status and Command Relationship. NAS, Patuxent River, MD, is a shore activity in an active status under a Commanding Officer.

a. Command Echelon

- 1 Chief of Naval Operations
- 2 Commander, Naval Air Systems Command
- 3 Commander, Naval Air Warfare Center
- 4 Commander, Naval Air Warfare Center Aircraft Division, Patuxent River, MD
- 5 Commanding Officer, Naval Air Station, Patuxent River, MD

b. Area Coordination

Commandant, Naval District, Washington, DC

c. Primary support responsibility for NAS, Patuxent River, MD, is exercised by the Commander, NAVAIRWARCENACDIV, Patuxent River, MD.

3. Functions. In accomplishing the assigned mission, the Commanding Officer, Naval Air Station, Patuxent River, MD, is responsible for the following:

a. Performing intermediate level maintenance for aircraft, aeronautical equipment, aviation support equipment, and armament handling equipment located aboard the Patuxent River complex.

b. Operating an airfield and seadrome; providing search and rescue services; providing aircraft crash and structural firefighting personnel, equipment and operations; providing repair and maintenance of ground electronics equipment; providing explosive handling and storage and small arms facilities.

c. Providing public works support, including facilities, engineering, base and facilities maintenance, utilities, and transportation.

- d. Administering environmental protection and energy programs.
- e. Providing a comprehensive safety program that encompasses general safety, as well as occupational safety and health.
- f. Providing supply services, including material procurement, storage and distribution.
- g. Managing the hazardous material program for the complex.
- h. Providing administrative and military community services, including security, personnel, religious, recreation, family housing and bachelor quartering service.

4. Tasks

a. The Marine Corps Security Force, Patuxent River, MD, is aligned as an echelon 6 shore activity reporting to the Commanding Officer, NAS, Patuxent River, MD, per OPNAVNOTE 5450, Ser 09B22/2U510097 of 30 Jul 92. This alignment is for operational command only. Administrative command is exercised through the Marine Corps Security Force Battalion Atlantic, Norfolk, VA.

b. The Navy Resale Activity, Patuxent River, MD, is aligned as an echelon 6 shore activity reporting to CO NAS for military command. Primary and technical support is provided by the Commander, Naval Supply Systems Command.